

### STATE OF WASHINGTON

#### DEPARTMENT OF ECOLOGY

7601 W. Clearwater, Suite 102 . Kennewick, Washington 99336 . (509) 546-2990

December 7, 1993

Mr. James Rasmussen U.S. Department of Energy P. O. Box 550 Richland, WA 99352

Mr. R. L. Lerch Westinghouse Hanford Company P. O. Box 1970 Richland, WA 99352

Dear Messrs. Rasmussen and Lerch:

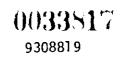
Re: Hanford Facility Dangerous Waste Part A Permit Application Target
Actions via USDOE Letter 93-RPS-336 (August 31, 1993)

In our letter dated September 8, 1993, Ecology accepted the revised T Plant Part A Permit Application contingent on the compliance with the schedule for improvements (target actions) at T Plant identified in the August 31, 1993, letter referenced above. Our letter also stated in part "Should U. S. Department of Energy or Westinghouse Hanford Company fail to meet the interim milestone schedule or any of the target dates, the Part A permit application may be revoked." The first target action, "Implement Periodic Visual Inspection and Static Leak Test Program for 2706-T and 211-T Tanks" was to be completed by October 1993. As the responsible Ecology Unit Manager for T Plant, I performed an inspection to verify completion of this target action on December 2, 1993. The work performed to fulfill the intent of this target action was found to be incomplete and unsatisfactory during this inspection. The details of this inspection are discussed below.

## Leak Test Program:

The static leak test program for 2706-T and 211-T tanks was not implemented. Although a desk instruction was developed, actual testing was not performed. I concurred that there is not sufficient liquid in the 2706-T sump to conduct the static leak test of the 2706-T sump at this time. When asked why the static leak test for 211-T sump was not









Mr. James Rasmussen Mr. R. L. Lerch December 7, 1993 Page 2

performed, T Plant management stated that for convenience purposes, the decision was to wait until enough liquid was collected in the 2706-T sump to allow simultaneous testing of both tanks. They acknowledged that sufficient liquid existed to perform a test of the 211-T sump.

I asked if there was a special concern for the 211-T sump due to a lack of regular leak detection surveillance or automatic leak detection capability for the sump, versus the 2706-T sump, which is checked regularly and has leak detection capability. T Plant management responded that their visual inspection of the 211-T sump did not reveal any discrepancies, and therefore, no urgency was placed on implementing the leak test program for the 211-T sump.

Additionally, the leak detection instrument for the 2706-T sump was found to be malfunctioning as of November 17, 1993. The liquid level in 2706-T sump has been measured with a tape since that time.

#### Visual Inspection Program:

The 211-T sump was visually inspected by T Plant personnel on July 6, 1993. The inspection report (attached) states that the sump contained approximately 6-8 inches of water and sludge at the bottom of the sump. Failure to remove existing liquids and sludge invalidates the quality of the visual inspection. Due to increased static head pressure during operation, the greatest risk for leakage from the sump is at the lowest point. Consequently, inspection of the floor area is critical in determining the integrity of the sump, and necessary in order to verify the fitness of the sumps for continued use. The visual inspection desk instruction, dated October 6, 1993, paragraph 6.2, requires visual inspection of "the entire interior surface (including all the walls and floor)." The inspection performed on July 6, 1993, states, "Not possible to view bottom due to remaining liquid." This inspection is considered by Ecology to be inadequate to assess the fitness of the 211-T sump.

The inspection of the 2706-T sump (attached), performed on August 5, 1993, identified that "debris and sump coating made it difficult to inspect all areas thoroughly" and "the sump coating was found to be in poor condition (flaking, peeling)." This raises two concerns to Ecology: 1) the sump should have been properly cleaned to perform an adequate inspection, and 2) no action was recommended or taken to repair the poor condition of the sump coating and erosion of the sump concrete. Also, the desk instruction does not adequately address or define the corrective action necessary to

Mr. James Rasmussen Mr. R. L. Lerch December 7, 1993 Page 3

resolve deficiencies identified during the inspection. It should be noted that the desk instruction was not approved by Westinghouse Hanford Company for use until October 6, 1993, approximately two months after the visual inspection was performed.

An additional problem noted during this inspection was a leaking backflow preventer that has been leaking potable water into the 2706-T sump since at least May 5, 1993. Facility Daily Surveillance Logs (Attached) for May 5, November 1, and December 1, 1993, show the continued reporting of leakage of potable water into the sump without timely corrective action being taken to repair the device. The estimate I was provided on December 2, 1993, was approximately 200 to 300 gallons per month have been leaking into the sump. Our main objective in negotiating one of the target actions was to eliminate clean water from becoming mixed radioactive hazardous waste. Ecology has previously taken compliance action against T Plant for identifying discrepancies during internal inspections/surveillances and failing to take timely corrective action. The continuance of this practice is unacceptable.

Based on the information obtained during Ecology's inspection performed on December 2, 1993, acceptable visual inspection and leak test programs were not properly or adequately implemented by T Plant by October 1993. To allow the facility another opportunity to come into compliance with the intent of the target action, the facility must implement effective visual inspection and leak test programs for the 2706-T and 211-T sumps by December, 15, 1993. Specifically this means:

- Modify as necessary Visual Inspection and Leak Test Desk Instructions,
- Perform leak test of 211-T sump,
- Initiate leak testing of 2706-T sump, but only if sufficient liquid exists,
- → Empty and cleanout, as necessary, 211-T sump,
- Perform visual inspection of 211-T sump,
- Initiate corrective action for poor coating of 2706-T sump, and
- Report to the Ecology Unit Manager the status of these corrective actions.

Failure to satisfy the above requirements will result in the immediate revocation of the T Plant Part A Permit and the facility will no longer be able to operate as a treatment and storage facility and, at that time, will be subject to enforcement action for any violations of applicable requirements.

The following corrective actions need to be taken by January 15, 1994:

- Repair the backflow preventer leaking to the 2706-T sump,
- Repair the leak detection device for 2706-T, and

Mr. James Rasmussen Mr. R. L. Lerch December 7, 1993 Page 4

> Report on the progress of installing or instituting leak detection for the 211-T sump.

Ecology understands the importance of the facility to maintain its status as an interim treatment and storage facility. It must also be understood that Ecology has agreed to allow the facility to operate under a corrective action plan to resolve out-of-compliance conditions that currently exist. Therefore, it is critical that the full intent of the target actions be achieved. If there is any question or concern as to the intent or ability to achieve any target action it is imperative that the facility immediately communicate those concerns with the responsible Ecology Unit Manager. Should you have any questions regarding the issues identified in this letter, please contact me at (509) 736-3022.

Sincerely,

Casey O. Ruud

T Plant Unit Manager,

Nuclear and Mixed Waste Management Program

COR:mf
Attachments

cc: Jerry Faulk, WHC
Paul Crane, WHC
Matt La Barge, WHC
Dan Duncan, WHC

# CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

CO Ruud, Ecology

J Rasmussen, RL RL Lerch, WHC

9308819

Xref: 9306369

Subject: HANFORD FACILITY DANGEROUS WASTE PART A PERMIT APPLICATION TARGET ACTIONS VIA USDOE LETTER 93-RPS-336 (AUGUST 31, 1993)

#### INTERNAL DISTRIBUTION

| Approval | Date | Name                    | Location | W/at1 |
|----------|------|-------------------------|----------|-------|
|          |      | Correspondence Control  | A3-01    |       |
|          |      | President's Office      | 83-01    |       |
|          |      | G. D. Carpenter         | H6-30    |       |
|          |      | D. J. Carrell           | H6-22    |       |
|          |      | P. J. Crane             | T3-28    |       |
|          |      | N. E. Darling           | H6-21    |       |
|          |      | L. P. Diediker          | T1-30    |       |
|          |      | R. H. Engelmann         | H6-26    |       |
|          |      | B. G. Erlandson         | H6-20    |       |
|          |      | G. W. Faulk             | T3-28    |       |
|          |      | K. A. Gano              | X0-21    |       |
|          |      | E. M. Greager           | H6-30    |       |
|          |      | G. W. Jackson, Assignee | H6-21    |       |
|          |      | M. J. La Barge          | T3-28    |       |
|          |      | R. J. Landon            | H6-21    |       |
|          |      | R. E. Lerch             | B3-63    |       |
|          |      | J. J. Luke              | H6-25    |       |
|          |      | P. J. Mackey            | B3-15    |       |
|          | •    | H. E. McGuire, Level 1  | B3-63    |       |
|          |      | S. R. Moreno            | B3-06    |       |
|          |      | S. M. Price             | H6-23    |       |
|          |      | A. R. Sherwood          | H6-30    |       |
|          |      | D. C. Thornton          | H6-20    |       |
|          |      | EPIC /                  | #6-08 /  |       |
|          |      |                         | - 9%     |       |
|          |      | GWJ:BGE File/LB         | H6-20    |       |



54-6000-117 (9/88) (EF) WEF008 Distribution Coversheet